

Red River Authority of Texas Clean Rivers Program



AQUATIC LIFE MONITORING



APRIL 23, 2019

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RED RIVER AUTHORITY OF TEXAS
CRP ENVIRONMENTAL TECHNICIAN**

SegID: 0214

Wichita River Below Diversion Lake Dam

From the confluence with the Red River in Clay County to Diversion Dam in Archer County

Segment Type Freshwater Stream

AU_ID: 0214_01 *From the confluence with the Red River upstream to the confluence with an un-named tributary immediately upstream of FM 2393*

Flow Type

perennial

Flow Type Source

TSWQS

ALU Designation

High

ALU Designation Source

TWQS-Appendix A

Station ID(s): 10145

AU_ID: 0214_02 *From an un-named tributary immediately upstream of FM 2393 upstream to the River Road WWTP*

Flow Type

perennial

Flow Type Source

TSWQS

ALU Designation

High

ALU Designation Source

TWQS-Appendix A

Station ID(s): 10148; 10149

AU_ID: 0214_03 *From the River Road WWTP upstream to the confluence with Buffalo Creek*

Flow Type

perennial

Flow Type Source

TSWQS

ALU Designation

High

ALU Designation Source

TWQS-Appendix A

Station ID(s): 10150; 10151; 10152; 10153; 15999; 16734; 16735; 18832; 20321

AU_ID: 0214_04 *From the confluence with Buffalo Creek upstream to the confluence with Beaver Creek*

Flow Type

perennial

Flow Type Source

TSWQS

ALU Designation

High

ALU Designation Source

TWQS-Appendix A

Station ID(s): 10154

AU_ID: 0214_05 *From the confluence with Beaver Creek upstream to the Diversion Lake Dam*

Flow Type

perennial

Flow Type Source

TSWQS

ALU Designation

High

ALU Designation Source

TWQS-Appendix A

Station ID(s): 10155; 10156

Biological Monitoring



- Aquatic Life Monitoring on Beaver Creek (15120) and Wichita River (10145)
- Biological Assessments
 - Aquatic Life Use – Attainability Analyses
 - Receiving – Water Assessments
 - Aquatic Life Monitoring
 - Aquatic Life Assessments

Biological Monitoring



- Index Period
 - Help determine ALUs or to evaluate support of existing ALUs
 - Includes Critical Period and Non-critical Period
 - March 15 – October 15
- Critical Period
 - July 1- Sept 30
- Non-Critical Period
 - March 15 – June 30, and Oct 1 – Oct 15

Biological Monitoring



- **Aquatic – Life Monitoring**

- Characterization of the fish assemblage
- Characterization of the benthic macroinvertebrate community
- Assessment of the stream's physical habitat
- Instantaneous field measurements
- Measurement of flow discharge
- 24 –Hour Dissolved Oxygen monitoring
- Conventional water chemistry sample

Wolf Creek LDS Study



Wolf Creek LDS Study



White Deer Creek LDS Study



White Deer Creek LDS Study



Wolf Creek LDS Study



White Deer Creek LDS Study



McClellan Creek – Largemouth Bass



McClellan Creek – Physical Habitat



Sweetwater Creek – 24 hour DO



Buck Creek at US 83 – Nekton Sampling



Salt Fork Red River at US 83 - Benthics



N Wichita River – Nekton Sampling



Questions

